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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/070,862

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Dietmar Wolter

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VIDAS, ARRETT & STEINKRAUS, P.A.
SUITE 400, 6640 SHADY OAK ROAD
EDEN PRAIRIE, MN 55344

EXAMINER

SHAFFER, RICHARD R

ART UNIT

PAPER NUMBER

3733

MAIL DATE

DELIVERY MODE

11/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/070,862

Applicant(s)

WOLTER ET AL.

Examiner

Richard R. Shaffer

Art Unit

3733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-17 is/are pending in the application.
- 4a) Of the above claim(s) 6,7 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,8-15 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The amended drawings filed on September 17th, 2007 are acknowledged and accepted by the examiner. The previous corresponding drawing objections are hereby withdrawn.

Specification

The disclosure is objected to because of the following informalities:

Applicant repeatedly uses the term "fixateur." Such as found on page 2 and in the claims. The word is not in English when there is a pre-existing well known equivalent of "fixator" in the English language as applicant has proved himself. It is required that applicant correct for the improper language usage.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4, 5, 8-15 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are unclear for a plurality of reasons. Examples include:

Claim 4: Figure 1 demonstrates that the reinforcements 5,6 are at holes 2 and 3. How can there be reinforcement "compared" to the configuration at holes 2, 3, 4? Applicant did state a proper Markush style claim. There must be a colon ":" after consisting of and thus does not require language such as "having" since the structure is

defining what the reinforcement is and the usage of and/or language is improper. It must be in a standard list form separated by commas with the final element of the list only using and, not and/or. Claim 4 now also recites the head of the screw is adapted to be fixedly anchored in the force carrier and the "load carrier." It is recommended that the final line following a period already is deleted due to the improper language of load and following the period.

Claims 15 and 17 suffer from the same issue as claim 4 describing how the reinforcement is "compared to" itself essentially.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 4, 5, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Pawluk (US Patent 4,955,886).

Pawluk discloses a bone plate (**40, Figures 3 and 4**) having holes (**48, 50**) for bone screws to be inserted; there are two adjacent holes (right most **50** and left most **48**) to be located on opposite sides of a fracture zone; and since as easily shown in **Figures 3 and 4**, the cross-sectional area is reduced as one moves away from the fracture zone therefore meaning the closer holes are "reinforced" relative to the further holes.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 8-13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pawluk in view of Wagner et al (US Patent 6,454,769).

Pawluk discloses all of the claimed limitations except for obliquely orientated holes with at least two inclined towards each other and screws conically tapered and threaded in the head portion in order to be inserted at a plurality of angular orientations.

It is well known in the art to orientate screws on opposite sides of a fracture site towards one another in order to increase compression and the likelihood of proper bone repair. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to angle at least a hole on each side of the fracture zone towards each other to improve bone repair.

Wagner et al further teach that obliquely orientated screws are desired to reduce back out (**Column 2, Lines 58-60**). Wagner et al further teach the use of a conically threaded head screw with a ring in order to fix the screw at a plurality of angles relative to the plate without the need to having a specially designed hole therefore further providing to a surgeon greater flexibility in screw placement. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the

plate of Pawluk with rings and screws with conically threaded heads to provide for a simple way of fixing screws at oblique angles which further prevents screw back out.

Response to Arguments

Applicant's arguments filed September 17th, 2007 have been fully considered but they are not persuasive. In regard to the 35 U.S.C. 102(b) rejection, application argues that the screws of Pawluk are not "fixedly anchored" in the force carrier. When fixed into bone, the screws are fixed to plate. Neither can move relative to one another. Applicant seems to be arguing unclaimed features such as the locking threads in the head of the disclosed invention.

In regard to the 35 U.S.C. 103(a) rejection, applicant attempts to state that the threaded rings of Wagner et al are specific for the human spine. This is not found persuasive in the slightest. The teaching of Wagner et al was merely for an anti-backout feature for a bone plate which also allows for screws to be obliquely orientated. As explained prior to Wagner et al in the previous and current Office Actions, it is well known to obliquely orientate screws on opposite sides of a fracture to apply compression (distraction is also known for bone plates however). Wagner et al therefore merely taught an ideal design for providing for obliquely orientated screws which further includes a conical shape and thread to further improve anti-backout capability. One of ordinary skill in the art would have easily and readily appreciated the teachings of Wagner et al for the ability to provide an obliquely orientated screw and ring structure to allow a plurality of fixed angles while preventing back-out.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard R. Shaffer whose telephone number is 571-272-8683. The examiner can normally be reached on Monday-Friday (7am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Richard Shaffer
November 16th, 2007



EDWARD C. ROENTGEN
SUPERVISORY PATENT EXAMINER